

# Receiving Report

Date:

17-83-8

Batch No:

137015

Supplier:

E.B pearlless

Dart P/O:

35233

Packing Slip: Yes  No   
 Invoice: Yes  No   
 Receipt: Cash  Cr   
 New Supplier Yes  No

Release Note Attached: Yes  No  N/A   
 Waybill Attached: Yes  No   
 Shipment Complete: Yes  No  N/A   
 QC18 Inspection \_\_\_\_\_  
 Work Order \_\_\_\_\_

## Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver

QC12

SP.

Production/Admin:

Date \_\_\_\_\_

Location \_\_\_\_\_

Received/Costing \_\_\_\_\_

Initial \_\_\_\_\_





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO35233**

Purchase Order Date 2/7/2017

PO Print Date 2/7/2017

Page Number 1 of 2

**Order From :** VC-ROY001

RBC ROYAL BANK - VISA  
PAYMENT CENTRE, PO BOX 4016, STAT. A  
TORONTO, ON M5W 1X6  
CA

**Ship To :** DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA



FEB 08 2017

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Customer POID	
Ship To Contact	Customer Tax #	10127-2607
Ship To Phone	Terms	COD
Ship Via:	Currency	CAD
Ship Acct:	FOB	Destination-Collect

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
Line Comments			Promise Date				
Delivery Comments							
1	71400-40	49-REAGENT 2.5L HENKEL REAGENT SOLUTION 29	3/6/2017	Yes 3/6/2017	1.00 Each	\$304.30	\$304.30

**Deliver To:** GARY

2	71400-40	592413-450GM LOCTITE REAGENT 2	3/6/2017	Yes 3/6/2017	1.00 Each	\$291.50	\$291.50
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**Deliver To:** GARY

3	71400-40	592416 TITRATING SOLUTION 104	3/6/2017	Yes 3/6/2017	1.00 Each	\$44.71	\$44.71
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**PO Instructions:** E.B. PEERLESS LTD A KRAYDEN COMPANY

Note:

SPH-03-8

# KRAYDEN

CANADA

## MAIL REMITTANCE TO

Unit 130 - 6651 Elmbridge Way  
 Richmond, BC V7C 5C2  
 Phone: (800) 663-3271  
 website: <http://krayden.com>

Bill to: DART AEROSPACE LTD.  
 1270 ABERDEEN STREET  
 HAWKESBURY, ON K6A 1K7  
 CANADA

Phone: (613) 632-9577 Fax: (613) 632-1053

## PACKING SLIP

Order Number	925310-1
Printed Date	03/01/2017
Ordered Date	02/28/2017
Page	1

## Ship to:

DART AEROSPACE LTD.  
 1270 ABERDEEN STREET  
 HAWKESBURY, ON K6A 1K7  
 CANADA

## GARY

Phone: (613) 632-9577 Fax: (613) 632-1053

Cust Code	Ordered By	Salesman	Entered By	Customer PO	Wanted Date
1DART	CHANTAL LAVOIE	Angelo Cristiano	cremedios	PO35233	02/08/2017
Ship Via Account	FOB	Ship Via See Comments Below		Terms	
		Customer/Order Instructions		DUE ON RECEIPT	

## SHIP PUROLATOR GROUND COLLECT ACCT. # 7684382

## CUSTOMER NEEDS ORDER ON 03/06/2017

Quantity	U/M	Item #	Description	Extension
Order Ship Back				
1 1 0	EA	49-REAGENT-2.5L	<p>HENKEL ST REAGENT SOLUTION 49    CP HYDROCHLORIC ACID (592438)</p> <p>** NOTES **    MFG. CERTIFICATE OF CONFORMANCE    ATTACHED    MSDS DATED 07/06/2015 ATTCHED WITH    SHIPMENT</p> <p>-- LOT NUMBERS --</p> <p>Qty Lot</p> <p>1 PB65035591    REQUIRED DATE 02/08/2017</p>	<p>DOM 12/13/2016</p> <p>DOE 12/13/2018</p>
1 0 1	EA	592413-450GM	<p>LOCTITE REAGENT 2</p> <p>** NOTES **    MFG. CERTIFICATE OF CONFORMANCE    REQUIRED    MSDS DATED 03/03/2015 ATTACHED WITH</p>	

Continued on next page....

SP7-03-8



The products listed are considered ITAR or EAR controlled pursuant to 22 CFR Part 120/130 or 15 CFR Parts 730-774, respectively. Transfer of the products by any means to a non-US person, whether in the United States or abroad, a prohibited country, or for a prohibited end-use, without the proper U.S. Government authorization (e.g., License, exemption, NLR) is strictly prohibited. Reference the description for individual item classifications. Customer is responsible for obtaining any required export licenses or authorizations.

Krayden, Inc. terms and conditions apply to all orders and can be viewed at <http://krayden.com/terms-and-conditions>.

Certificate of Conformance: We certify that the materials furnished have been manufactured in accordance with applicable manufacturing specification and conforms to the purchase order. Physical and chemical data pertaining to this order are available for inspection at the manufacturer.

This certificate is valid unsigned.

Q/C Signature:

# KRAYDEN

CANADA

MAIL REMITTANCE TO

Unit 130 - 6651 Elmbridge Way  
Richmond, BC V7C 5C2  
Phone: (800) 663-3271  
website: <http://krayden.com>

**Bill to:** DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
CANADA

Phone: (613) 632-9577 Fax: (613) 632-1053

Cust Code	Ordered By	Salesman	Ship Via Account	FOB	Ship Via	Description	Terms	Extension
1DART	CHANTAL LAVOIE	Angelo Cristiano			See Comments Below	SHIPMENT REQUIRED DATE 02/08/2017  HENKEL ST TITRATING SOLUTN 104 0.1 N SDIUM THIOSLFTE (592416)  ** NOTES ** MFG. CERTIFICATE OF CONFORMANCE ATTACHED MSDS DATED 09/15/2014 ATTACHED WITH SHIPMENT.  THANK YOU. CHRIS -- LOT NUMBERS -- Qty      Lot 1      PB70245212 REQUIRED DATE 02/08/2017	DUE ON RECEIPT	
						DOM	DOE	
						01/13/2017	07/12/2017	

SP17-03-8



The products listed are considered ITAR or EAR controlled pursuant to 22 CFR Part 120/130 or 15 CFR Parts 730-774, respectively. Transfer of the products by any means to a non-US person, whether in the United States or abroad, a prohibited country, or for a prohibited end-use, without the proper U.S. Government authorization (e.g., License, exemption, NLR) is strictly prohibited. Reference the description for individual item classifications. Customer is responsible for obtaining any required export licenses or authorizations.

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**Certificate of Conformance:** We certify that the materials furnished have been manufactured in accordance with applicable manufacturing specification and conforms to the purchase order. Physical and chemical data pertaining to this order are available for inspection at the manufacturer.

This certificate is valid unsigned:

*Q/C Signature:* *[Signature]*

# PACKING SLIP

Order Number	925310-1
Printed Date	03/01/2017
Ordered Date	02/28/2017
Page	2

Ship to:

DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
CANADA

GARY  
Phone: (613) 632-9577 Fax: (613) 632-1053

Entered By	Customer PO	Wanted Date
cremedios	PO35233	02/08/2017

Terms	DUE ON RECEIPT
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# Certificate of Analysis

**Henkel Corporation**  
2515 Meadowpine Blvd  
Mississauga, Ontario L5N 6C3

DATE 22/February/2017  
PAGE 1 from 1

**Attention of:**  
EB Peerless Ltd  
A Krayden Company  
(ATA-Aerospace-USD)  
2430 Lucknow Dr Unit 12 & 13  
Mississauga ON L5S 1V3

YOUR ORDER: 55121  
DATE OF ORDER: 10/February/2017  
DELIVERY NOTE: 87422234  
DELIVERY POSITION: 900005  
CUSTOMER NO: 1563372

Contact Person: Nicole Masters  
Phone: (905) 814-6511 Ext. 4672.  
Fax: (905) 814-5391

**Material:** REAGENT SOLUTION 49 (2.5 L)  
**Material-No:** 592438  
**Batch no:** PB65035591

**Quantity:** 1.000 EA  
**Expiration date:** 730 Days from the Production Date  
**Production date:** 13/December/2016

Specification	Analysis	Specification	Dimens.
hydrochloric acid	37.08	36.00 - 38.00	%

The above data represent the results of our quality assessment. They do not free the purchaser from his own quality check nor do they confirm that the product has certain properties or is suitable for a specific application.

(This certificate is created by an electronic system and is valid without a signature).



# Certificate of Analysis

**Henkel Corporation**  
2515 Meadowpine Blvd  
Mississauga, Ontario L5N 6C3

DATE 22/February/2017  
PAGE 1 from 1

**Attention of:**  
EB Peerless Ltd  
A Krayden Company  
(ATA-Aerospace-USD)  
2430 Lucknow Dr Unit 12 & 13  
Mississauga ON L5S 1V3

YOUR ORDER: 55121  
DATE OF ORDER: 10/February/2017  
DELIVERY NOTE: 87422234  
DELIVERY POSITION: 900004  
CUSTOMER NO: 1563372

Contact Person: Nicole Masters  
Phone: (905) 814-6511 Ext. 4672.  
Fax: (905) 814-5391

**Material:** TITRATING SOLUTION 104  
Known as: TITRATING SOLUTION 104 (1L)  
**Material-No:** 592416  
**Batch no:** PB70245212  
**Quantity:** 1.000 EA  
**Expiration date:** 180 Days from the Production Date  
**Production date:** 13/January/2017

Specification	Analysis	Specification	Dimens.
<b>Appearance</b> TRANSPARENT COLORLESS LIQUID	OK	-	-

The above data represent the results of our quality assessment. They do not free the purchaser from his own quality check nor do they confirm that the product has certain properties or is suitable for a specific application.

(This certificate is created by an electronic system and is valid without a signature).

**SHIPPER'S DECLARATION FOR  
DANGEROUS GOODS**

EBP  
Reference  
Number

925310-1

Date: MAR. 3, 1977

# PURULATOR

**TO:**  
Consignee: **DART AEROSPACE LTD.**  
**1270 ABERDEEN ST.**  
**HAWKESBURY, ON**  
**K6A 1K7**  
**TEL. NO.: 613-632-9577**

The logo for The Petrellus Ltd. is a black and white graphic. It features a large, stylized bird in flight at the top, with its wings spread wide. Below the bird is a diamond-shaped frame containing the company name "THE PETRELLUS LTD." in a serif font. The word "THE" is on the first line, "PETRELLUS" is on the second line, "LTD." is on the third line, and "PRINTERS" is on the fourth line, which is partially cut off at the bottom right corner. The entire logo is set against a background of horizontal lines.

**E.B. PEERLESS LTD.**  
Unit 12 & 13 - 2430 Lucknow Dr.  
Mississauga, ONT. L5S 1V3  
Phone: (905) 362-1151  
Fax: (905) 362-1155  
Toll Free: 1-866-327-7111  
[www.ebltd.com](http://www.ebltd.com)

Route: \_\_\_\_\_

**BY SIGNING THIS BILL OF LADING, CARRIER ACKNOWLEDGES  
POSSESSION OF PLACARDS AND INFORMATION FOR HAZARDOUS  
MATERIALS DESCRIBED ABOVE.**

Placards: Yes  No  Affixed

Type and No. of Placards Offered

E.R. Information provided on: Guide #  Form  MSDS

IN CASE OF DANGEROUS GOODS EMERGENCY: 2-E-174 CANUTEC (613) 996-6666

**DECLARED VALUE**

<b>COD</b> Amount \$	CASH <input type="checkbox"/>	CHEQUE <input type="checkbox"/>	CERT. CHO. <input type="checkbox"/>	PREPAID <input type="checkbox"/>	C.O.D. fee	COLLECT <input type="checkbox"/>
	The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.					
(Signature of Consignor)			PREPAID	COLLECT		

MAXIMUM LIABILITY \$2.00 LB. UNLESS VALUE DECLARED OTHERWISE

of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the covering classification on the date of shipment.

terms and conditions in the governing classification on the date of shipment.  
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

RECEIVED, subject to the classification and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of content of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any

**CONSIGNEE**

SHIPPER	<b>E. B. PEERLESS LTD.</b>	CARRIER
PER	<i>J</i>	PER
DATE	<i>2/2/17</i>	DATE

PER

1

# Safety Data Sheet



Revision Number: 002.3

Issue date: 03/03/2015

## 1. PRODUCT AND COMPANY IDENTIFICATION

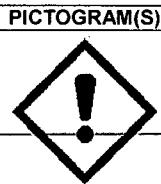
Product name:	REAGENT 2	IDH number:	592413
Product type:	Auxiliary product	Item number:	592413
Restriction of Use:	None identified	Region:	United States
Company address:		Contact information:	
Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067		Telephone: (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com	

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**WARNING:** CAUSES SKIN IRRITATION.  
CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A



### Precautionary Statements

Prevention:	Wash thoroughly after handling. Wear eye and face protection. Wear protective gloves.
Response:	IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Not prescribed
Disposal:	Not prescribed

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
K-iodide	7681-11-0	60 - 100

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Get immediate medical attention. Do not induce vomiting.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

#### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	Not a fire hazard.
<b>Hazardous combustion products:</b>	Irritating and toxic gases or fumes may be released during a fire.

#### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Wear a dust mask if dust is generated above exposure limits. Avoid breathing dust. Wear appropriate protective equipment and clothing during clean-up.
<b>Clean-up methods:</b>	Sweep up or gather material and place in appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	For industrial use only. Avoid breathing dust. Avoid skin and eye contact. Wash thoroughly after handling.
<b>Storage:</b>	Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
K-iodide	0.01 ppm TWA Inhalable fraction and vapor.	None	None	None

<b>Engineering controls:</b>	Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.
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**Respiratory protection:** When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.

**Eye/face protection:** Safety goggles or safety glasses with side shields.

**Skin protection:** Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid
<b>Color:</b>	White
<b>Odor:</b>	None
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not available.
<b>Vapor pressure:</b>	Not applicable
<b>Boiling point/range:</b>	Not applicable
<b>Melting point/ range:</b>	Not applicable
<b>Specific gravity:</b>	Not applicable
<b>Vapor density:</b>	Not applicable
<b>Flash point:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not applicable
<b>Solubility in water:</b>	Appreciable
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	Not applicable
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Oxides of potassium, free or ionic iodine.
<b>Incompatible materials:</b>	This product may react with strong acids, bases and oxidizing agents.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Keep away from heat, ignition sources and incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects/Symptoms**

**Inhalation:** Dusts of this product may cause irritation of the nose, throat, and respiratory tract.  
**Skin contact:** No skin irritation can be expected from single short-term exposure to this product. Prolonged or repeated contact may produce some irritation.  
**Eye contact:** Dust or powder may irritate eye tissue.  
**Ingestion:** May be harmful if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
K-iodide	None	Allergen, Developmental, Irritant, Sensory, Skin, Vascular	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
K-iodide	No	No	No

**12. ECOLOGICAL INFORMATION**

**Ecological information:** No data available.

**13. DISPOSAL CONSIDERATIONS**

Information provided is for unused product only.

**Recommended method of disposal:** Dispose of according to Federal, State and local governmental regulations.

**Hazardous waste number:** Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

**14. TRANSPORT INFORMATION**

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

**U.S. Department of Transportation Ground (49 CFR)**

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

**International Air Transportation (ICAO/IATA)**

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

**Water Transportation (IMO/IMDG)**

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

**15. REGULATORY INFORMATION****United States Regulatory Information**

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

**TSCA 12 (b) Export Notification:** None above reporting de minimis

**CERCLA/SARA Section 302 EHS:** None above reporting de minimis  
**CERCLA/SARA Section 311/312:** Immediate Health  
**CERCLA/SARA Section 313:** None above reporting de minimis

**California Proposition 65:** No California Proposition 65 listed chemicals are known to be present.

**Canada Regulatory Information**

**CEPA DSL/NDSL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

**16. OTHER INFORMATION**

This safety data sheet contains changes from the previous version in sections: Reviewed MSDS. Reissued with new date.

**Prepared by:** Jennifer McKay, Regulatory Affairs Specialist

**Issue date:** 03/03/2015

**DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

# Material Safety Data Sheet



Revision Number: 004.3

Issue date: 07/06/2015

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	REAGENT SOLUTION 49 (2.5 L)	IDH number:	592438
Product use:	Auxiliary product	Item number:	592438
Region:	Canada	Contact information:	
Company address:	Henkel Canada Corporation 2515 Meadowpine Boulevard Mississauga, Ontario L5N 6C3	Telephone:	905.814.6511
		MEDICAL EMERGENCY Phone:	Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711
		TRANSPORT EMERGENCY Phone:	CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887
		Internet:	www.henkelna.com

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Physical state:	Liquid	WHMIS hazard class:	E
Color:	Colorless		
Odor:	pungent		

DANGER-CORROSIVE!: CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.

Relevant routes of exposure: Skin, Inhalation, Eyes

### Potential Health Effects

Inhalation:	Mists, vapors or liquid may cause severe irritation or burns. Inhalation of mists or vapors may produce upper airway edema, wheezing, pulmonary edema, pneumonitis and respiratory failure.
Skin contact:	This product is severely irritating to the skin and may cause burns.
Eye contact:	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.
Ingestion:	This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.
Existing conditions aggravated by exposure:	Eye, skin and respiratory disorders.

See Section 11 for additional toxicological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Hydrochloric acid	7647-01-0	30 - 60

## 4. FIRST AID MEASURES

Inhalation:	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
Skin contact:	Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention. Launder contaminated clothing before reuse.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

**Ingestion:** Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**Notes to physician:** Treat symptomatically and supportively.

## 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Extinguishing media:</b>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn. May react with metals to form flammable hydrogen gas.
<b>Hazardous combustion products:</b>	Upon combustion, oxides of chlorine may be released.
<b>Sensitivity to Mechanical Impact:</b>	Not available.
<b>Sensitivity to static discharge:</b>	Not available.

## 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.

**Clean-up methods:** Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations. Ventilate area.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. Provide adequate ventilation. Do not take internally. For industrial use only.

**Storage:** Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials.

For information on product shelf life contact Henkel Canada Customer Service at 800-263-5043.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Hydrochloric acid	2 ppm Ceiling	5 ppm (7 mg/m <sup>3</sup> ) Ceiling	None	None

Hazardous components	LD50s and LC50s	Health Effects/Target Organs
Hydrochloric acid	Oral LD50 (RABBIT) = 900 mg/kg Inhalation LC50 (RAT, 1 h) = 3124 ppm	Irritant, Corrosive, Kidney

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

## 14. TRANSPORT INFORMATION

### Canada Transportation of Dangerous Goods - Ground

Proper shipping name: HYDROCHLORIC ACID  
 Hazard class or division: 8  
 Identification number: UN 1789  
 Packing group: II

### International Air Transportation (ICAO/IATA)

Proper shipping name: Hydrochloric acid  
 Hazard class or division: 8  
 Identification number: UN 1789  
 Packing group: II

### Water Transportation (IMO/IMDG)

Proper shipping name: HYDROCHLORIC ACID  
 Hazard class or division: 8  
 Identification number: UN 1789  
 Packing group: II

## 15. REGULATORY INFORMATION

### Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

### United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

## 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Reviewed MSDS. Reissued with new date.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.

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